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# The Significance of Color In Food Marketing

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# **The Significance of Color In Food Marketing**

A Capstone Project Submitted in Partial Fulfillment of the  
Requirements of the Renée Crown University Honors Program at  
Syracuse University

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and Renée Crown University Honors  
May 2013

Honors Capstone Project in Marketing and Advertising

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### **Abstract**

The effect of color on the perception and expectation of flavor and taste was researched. Psychological and scientific studies were used to demonstrate the benefits of using the right colors in advertising and marketing. Color, in these studies, was proven to affect consumers' behavior when purchasing food. Color is interpreted by different genders, races, and ages were also studied. Color is a significant marketing tool that can help attract the right target markets. Also, examples of how color has helped and hindered marketing campaigns in the past were examined.

Final advertising portfolio attached.

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**Preface: A Cheesy Beginning**

Clutching my grocery list in hand, I pushed my shopping cart toward the deli section of the store. I took my ticket and waited for the man behind the counter to ask, “How can I help you today?”

“I’d like a quarter-pound of American cheese.”

“Orange or white?”

“White,” I replied. As I waited for him to prepare my order, I noticed a young man around my age ordering the orange-colored cheese. I was astonished. How could he not know that white American cheese was clearly the better choice? Orange was ...well, gross.

But why did I think the white cheese was better? Both shades of cheese tasted exactly the same. They were both cut into the same square-shaped slices and stored in the same cabinet. They were even packaged the same way after ordering. Both slices had the same amount of calories and nutritional value. Was there a real difference between the products aside from the color? And did the color of the cheese really matter that much?

“Thank you,” I said as the man handed me my order. I glared at the orange-cheese-eater one last time as if to say, “You’re doing it wrong!” and pushed my cart onward.

But the rest of my isle wandering was plagued by thoughts of American cheese. I had never realized how much the color of a product mattered, especially to me. And now I needed to know why.

**Introduction**

With super-sized supermarkets and ever-growing product lines, the number of choices consumers make in just one aisle of the grocery store is overwhelming to think about. Between name brands, off-brands, new-brands, and little-known brands, imagine the number of decisions alone a shopper makes to buy a box of cereal.

The need to distinguish products has never been greater. In 1995, 70% of all purchasing decisions were made in-store and by 2012 that number climbed to 76% (The Global Association For Marketing Retail). Clearly, understanding consumers' behavior in-store has never been more important. According to OgilvyAction, the largest brand activation agency in the world, "what marketers really need is to understand the different kinds of decisions that shoppers are making, and then be able to generate insights that will help them develop smarter and more targeted programs to activate their brands in store" (OgilvyAction). The ability to influence, "the almost 20% [that] impulsively buy in categories they had no intention to buy from before entering the store" (OgilvyAction) is necessary for success.

However, there is a significant lack of research about the effect of color on consumer behavior. Color is a significant factor in consumer behavior, especially in the case of food purchases. Food color can no longer be limited to a study only within the food sciences. "Color is a vivid, affect-loaded, and memorable visual element and, as such, is an important marketing communications tool," (Lawrence L. Garber, Hyatt and Richard G. Starr) that is currently only used for flavor identification, not for strategic marketing purposes.

This paper will explore the research supporting this theory, demonstrate how color affects different groups of people in different ways, and provide examples of how color has influenced consumer behavior in the past and present to prove the significant role of food coloring in buying behavior and as a successful marketing technique.

## **Does Color Influence?**

### **An Unsightly Meal**

In 1936, H.C. Moir invited his colleagues from the Flavor Group of the Society of Chemistry and Industry to join him for a rather unusual dinner. Moir presented his guests with a buffet of foods dyed unexpected colors. Although the food's taste, texture, and smell was unaffected by the dye, many of the guest complained about the strange flavors and some even reported feeling ill. Moir's limited experiment was only the first of many to support the theory that color does influence the perception and experience of flavors (Garber, Hyatt and Starr).

### **Identified By Sight Alone**

Although not vital to the interpretation of taste, visual cues, like color, do influence the perception of taste, too. According to a study by Dana Small, a neuroscientist at the John B. Pierce Laboratory and the Yale School of Medicine, "food and drink are identified predominantly by the senses of smell and sight, not taste. Food can be identified by sight alone—we don't have to eat a strawberry to know it is a strawberry. The same goes for smell, in many cases" (Small).

Small suggests that sight affects how we perceive taste because we use it to identify food. But can color help humans identify unfamiliar food products?

### **A More Complex Question**

Does the color of food affect human's perception of its taste and flavor?

The question seems simple. But to find an answer, consider both:

“(1) Does the presence versus absence, or change in the intensity, of the color present in food or drink influence people’s perception of the intensity of a particular flavor (e.g., banana, strawberry, etc.) or taste (such as sweetness, sourness, etc.)? [Or] (2) Does food coloring influence the correct identification of a food or drink’s flavor?” (Spence, Levitan and Shankar).

Research by J.A. Maga, of the Department of Food Science and Nutrition at Colorado State University, can be used to answer the first of these questions. His study measured the effects of adding red, green, and yellow dyes to different aqueous solutions(Maga). He found that “the addition of green coloring to a sweet solution significantly increased taste sensitivity, while yellow color decreased the taste sensitivity”(Maga). J. Johnson and F. M. Clydesdale of the University of Massachusetts demonstrated in another experiment how darker red-colored solutions were rated 2-10% sweeter than lighter red-colored despite the fact that they actually contained less sucrose(Spence, Levitan and Shankar). Yet, when the colors were added to a sour solution, both the yellow and green greatly affected the participants’ taste sensitivity. This time red had no effect. But, when red was added to a bitter tasting solution, taste sensitivity decreased, while yellow and green had no effect. Adding color – yellow, green or red – had no effect on the perception of saltiness(Maga).

So why was the perceived taste difference much more pronounced in the sweet and sour solutions than in the bitter and salty solutions? Maga hypothesizes that, “there is a natural correlation between redness and sweetness as many fruits ripen” (Spence, Levitan and Shankar). Consider apples for example. The sweetest apple with the least amount of sourness is the red delicious. As the apple

spectrum fades from sweet to sour, the red color of the apples fade to yellow and then to green. The sourest-tasting apple is the bright green granny smith. This naturally occurring color pattern could explain how color effects human's perceived tastes. But why were there less color associations with the salty solutions? Maga theorizes that because salty foods can naturally occur in various colors, there are less consistent prior experiences for humans from which to draw (Spence, Levitan and Shankar). An article published by the National Academy of Sciences observes, "taste preferences have both an evolutionary component, because some genetic variations in taste are more adaptive than others, and a learned component resulting from experiences that arise from eating various flavored foods that have affectively different outcomes" (Palmer, Schloss and Kay).

A later experiment by Massimiliano Zampini, a professor at the Faculty of Cognitive Science and researcher at the Experimental Psychology Labs at the Università Degli Studi di Trento, answers the second part of the question. In the study, participants were fully conscious that the colors of the drinks they were sampling (red, green, orange, yellow, blue, or gray) were not in any way an indicator of taste (Spence, Levitan and Shankar). Nevertheless, the colors of the drinks "exerted a significant influence on participants' flavor identification responses" (Spence, Levitan and Shankar).

### **An Important Note On The Effect Of Expectations**

There is a great deal of research supporting the effects of color on humans' perception of taste and flavor intensity and identification – which is great

news for food marketers who understand the significance of these results. From package design to the color of the actual food, marketers can use color to influence consumer behavior and sell more products.

However, because color cues are so significant, the importance of using these visual signals properly is vital. Debra A. Zellner of Montclair State University and Paula Durlach of the Army Research Institute for the Behavioral and Social Sciences published an article in the *American Journal of Psychology* discussing how color affected the level of refreshment, flavor intensity, and preference for mint, lemon and vanilla flavor beverages. During their experiments they noted an important fact; “perceptions in different sensory realms do not occur in isolation” (Zellner and Durlach). Contributor to National College of Food Technology article *Sensory Properties of Foods*, F.J. Francis also writes about how other ‘visual appearance’ clues influence sensory perception. Color, in addition to whether a product is food or drink, hot or cold, transparent, translucent or opaque, leads to the “generation [of] specific expectations regarding the likely flavor of that food” (Spence, Levitan and Shankar). The anticipatory effects of these stimuli can actually lead to misidentification (Spence, Levitan and Shankar). Hence, marketers should use color with purpose and with respect to type of food product to avoid misidentification by consumers.

For example, according to the study by Zellner and Durlach, “subjects most often identified ‘clear’ as the most refreshing color for a food or drink, but they indicated brown was an un-refreshing color” Does that mean that an ice-cold (typically brown-colored) beer on a hot day isn’t perceived as refreshing? Should



all breweries around the world start developing new 'clear' formulas? Probably not because, visually, beer is expected to be brown. A case study in the *Journal of Marketing Theory and Practice*, recalls the introduction of 'Crystal Pepsi,' a clear version of the classic brown soda. Although the formula was indistinguishable from the original aside from the color, the "clearness connoted certain 'non-cola' flavor expectation"(Palmer, Schloss and Kay). Consumers who tried 'Crystal Pepsi' for the first time described the flavor as overpowering. Even those who were loyal Pepsi drinkers did not enjoy the 'new' beverage (Palmer, Schloss and Kay).

There is a delicate balance between color and taste. Marketers must consider the expectations of their consumers, not just their reaction to colors. In the case of beer, perhaps breweries should consider adding a lighter beer to their brand portfolio that is advertised most heavily during the hot summer months when beer is consumed as refreshment from the heat.

### **Who Does Color Influence?**

In the previous section, color was shown to influence consumers perceptions and expectations of food. However, knowing the significance of color is not enough. Marketers must consider in what ways color influences their targets differently. Gender, age and race all greatly impact how people respond to color.

The founder of the Wagner Color Research Institute, Carlton Wagner, discovered through his research that the color blue was associated with “wealth, trust, and security” (Madden, Hewett and Roth) and gray suggested “strength, exclusivity, and success” (Madden, Hewett and Roth). His research was specific to the United States. So when Wagner saw that Wienerschnitzel, a fast food franchise that served hot dogs in the United States, had a blue and gray logo he suggested that orange be added to the color palette. Wagner’s research indicated that orange signified cheapness, and his research was correct. After a few months, “Wienerschnitzel reported a 7% increase in sales” (Madden, Hewett and Roth).

There are numerous “cultural, economic, social, and other differences [that] make it difficult for firms to identify single brand image strategy”(Madden, Hewett and Roth). “Firms are just as likely to use different image strategies across markets as they are to keep the image strategy the same” (Madden, Hewett and Roth) because even something as simple as the color of a logo can be interpreted differently by various cultures. At the same time, “one marketing cue that global managers can use regardless of location is color” (Madden, Hewett and Roth). Brands such as Coca-Cola and Tiffany & Co are examples of the successful use of color to overcome language barriers and great a single global image.

### **Men and Women See Color Differently**

The fact that men and women see color differently is not surprising. From birth, people are taught that pink is for girls and blue is for boys. However, as these gender roles shift, marketers must look beyond previously accepted color ‘stereotypes,’ because men and women actually do see perceive color differently on a psychological level(Sturgess). While men are drawn to bright colors, women prefer softer colors. Although women tend to dislike achromatic colors, or colors with no hue (gray, white or black), men do. Similarly, women prefer tints, when white is added to a color, whereas men favor shades, when black is added to color(Tarter).

### **Does Age Matter?**

Linda Trent is the director of color marketing and design at The Sherwin-Williams Co., a leading paint store in the United States. She conducted a compressive research study that observed how different generations reacted to color.

Trent categorizes all individuals over the age of sixty-five as the ‘Mature Market.’ This target demographic is usually retired. Physically, they are less active and spend significantly more time inside their home. As a result, Trent suggests, “the colors that surround them may have a more profound effect on mood and even well-being” (Trent). She recommends marketers:

“Use fresh, cheerful colors such as buttery yellows, clear blues, fresh pinks, and warm whites. Don't avoid all greens, because when surrounded with

lush foliage colors, individuals report fewer upset stomachs - even when under stress. However, choose cleaner hues, such as jade, rather than avocado” (Trent).

Trent, in her study, categorized Baby Boomers as any individuals born between 1945 and 1964. Her research proposes that:

“Baby Boomers are drawn to soothing colors that cool and refresh the spirit - cleansing blues enhanced with purple tones; azure; and intense, iridescent blues with the slightest tinge of green. Favorite neutrals are chameleon shades that take on the undertones of colors around them, such as grays married with plum or green, or even yellow-green undertones that bridge the gap from gray to beige” (Trent).

However, Advertising Age columnist Pamela Paul disagrees. She says, “after you hit 45 or 50, you work harder at being young ... With Baby Boomers hitting their 50s, they're going to want to show how young they are by trying new colors” (Paul). Paul points out that, “today's 60-year-old was only 40 when MTV exploded. Old people aren't your little granny with a collar anymore. They're vibrant, they're in tune. The days of the old fogey are gone” (Paul). Marketers must keep in mind that as the ‘old fogey’ target disappears, branding products as cool, hip, and young will become much harder for marketers.

Unlike the ‘Mature Market’ and Baby Boomers, Generation X “primarily lived in a global economy. It's not surprising that they show strong acceptance of the global color palette” (Trent). This generation was really the first to become global citizens, and therefore this group’s response to color, in regard to ethnicity, is less varied. Trent advises marketers to “look for exotic greens from the

Australian landscape, violet, indigo, and Asian reds to add drama to neutral spaces awash in contrasting textures, as Generation Xers experiment with styles from around the world” (Trent).

Generation Next (also known as Generation Y or the Millennial Generation), has proved to be the most elusive demographic to marketers. So could color really make a difference in marketing strategies? Trent says yes, “For teenagers, cool sophistication is the design goal. Neon-like colors - especially green, yellow, and even purple - and rich, tropical hues delight today's youth” (Trent).

Color not only can be a key factor in marketing to teens, but also to much younger children. Trent’s research shows that “Murals, whimsy, sports team colors, and flower garden shades are ever-popular for children's spaces” (Trent). Paul agrees with Trent in this case and believes, “Young people are typically more open to than their elders to experimenting with color, [and] kids to day are exposed to an even wider palette from an early age”(Paul). Part of her study touched on babies and infants as well. She found “high-contrast colors and simple patterns that encourage scanning, focusing, tracking, orienting, and pattern recognition are not only favorites, they also help to stimulate physical and cognitive development. These studies indicate that red and blue are the colors preferred by babies” (Trent).

Of course, Trent concedes, “to some degree our reactions to color are psychologically and culturally induced”(Trent). However, marketers must understand that “age makes a difference in how we respond to color” (Trent) and

how people's responses change over time. Color is an important tool in indicating at what demographic a product is targeted.

### **A World Of Different Colors**

All marketers have to consider how color affects the way their brand is perceived by different genders and ages. But there is one more step for global marketers – culture. According to an article in the Journal of International Marketing:

“If the meaning associated with a color or combination of colors is different across cultures, marketers may benefit from pursuing a customized strategy with respect to the color associated with the brand, package, and so on. In contrast, when color meanings are similar across markets, a standardized strategy is more viable”(Madden, Hewett and Roth).

Although there has been limited research on the way different cultures perceive color, one notable study surveyed students of four different cultures – Japanese, Chinese, South Korean, and American – and noted the similarities and differences:

“All four cultures associate blue with high quality and red with love. Purple is associated with expensive for subjects from Japan, PRC, and South Korea. In contrast, respondents from the United States associate purple with inexpensive. Black is consistently associated with expensive and powerful across cultures” (Madden, Hewett and Roth).

A similar study reported “African American subjects like colors in the red-purple-black range, whereas white subjects prefer blues and greens” (Madden, Hewett and Roth). An *Advertising Age* article reports comparable results from a

related study by conducted by Jill Morton of Colorcom (Paul). Morton observed that “African Americans ...are drawn to strong, saturated color, often in the red, yellow and brown families, a preference that seems to be rooted in their African heritage” (Paul).

Paul’s article also details a study by Margaret Walch, director of the Color Association of the United States, on the color preferences of Hispanics. The results showed, “A preference among Hispanics for bright colors is a reflection of the intense lighting conditions in Latin America, since strong colors keep their character in strong sunlight. (By contrast, in northern climates, these colors can appear harsh)” (Paul). The Color Marketing Group, an association of color designers, predicts that these Latin influences will eventually expand to the country as a whole (Paul).

Innovations in travel and technology have made the world smaller than ever before. However, marketers must continue to be aware that differences in culture still exist. For example, “in India, Hindus consider orange the most sacred color, whereas the Ndembo in Zambia do not even consider orange a separate color” (Madden, Hewett and Roth). As more brands begin to go global, this research becomes increasingly more important.

## **How Much Does Color Influence?**

### **Butter Versus Margarine: The Great Dairy Debate**

In 1869, Napoleon III of France commissioned Mège-Mouries, a French chemist, to invent a cheaper, fat substitute for butter (Sass). Although this was great for the lower classes, which were unable to afford butter, most people still did not buy margarine because it was thought of as a lesser product. Then storeowners began to realize that margarine, which cost much less than butter to make, could not be distinguished (by sight) from butter when dyed yellow. They began packaging margarine as butter to increase their profit. So despite the noble intentions behind the Napoleon III's charge, Mège-Mouries' was only welcomed with anti-margarine regulations around the world (Dupre).

The harshest policies were in North America. In the United States, the yellow coloring of margarine was forbidden. Later in the mid-1870s, "27 states had some margarine legislation: 20 regulated labeling and packaging and seven downright prohibited its manufacture and sale" (Dupre). And in Canada, "margarine was under total prohibition from 1886 until 1949" (Dupre). Currently, Quebec still regulates the coloring of margarine (Sass).

This not very mellow battle over the color yellow proves how significant of a factor color is in consumer behavior. Years of lawsuits and legislation, some of which are still in place today, are all over the color of this substitute product. Traditionally, and this still applies today, the deeper the yellow color indicates a richer tasting butter. By adding dye, consumer's beliefs that margarine was a lesser product that many women were ashamed to serve in their homes, to a viable, even tasty, substitute (Sass).



**Trouble With ‘Treated’ Tuna**

Traditionally, chefs and diners alike could select the freshest tuna by the “cherry-red” (Moskin) color of its flesh. However, as Julia Moskin, New York Times columnist, writes, “it has become increasingly likely that the fish is bright red because it has been sprayed with carbon monoxide” (Moskin).

Why spray the fish to keep it looking fresh? Because even when the fish turns brown, or chocolate, the fish is not spoiled. The change in color is a natural reaction with the oxygen in the air, much like how other red meats, like beef, turn brown too. And carbon monoxide is found in wood smoke, which is used in cooking (Moskin). Anchor Kim Fischer, of ABC News in Utah, investigated the treatment of tuna in a special news segment (Fischer). During the evening program she described the colored fish the new, “pink slime” (Fischer), of the food industry, following the ground beef debacle early in 2012.

Currently, Food and Drug Administration allows the practice of spraying the fish with carbon monoxide to prevent the discoloring of tuna. The seafood industry, according to the New York Times article, predicts that about thirty-percent of the tuna that is imported has been treated. However, countries such as Japan and Canada have banned the practice to prevent retailers from selling fish that has long expired, but still looks fresh (Fischer).

Looking for the bright red coloring of fresh tuna is similar to the way consumers smell a cantaloupe in a supermarket to test for freshness. However, when it comes to tuna, brown does not mean spoiled. According to Moskin:

“Other factors determine color, including the fat content, species, and cut. The finest fresh bluefin, which sells for up to \$40 a pound at Tokyo’s wholesale fish markets, is not a deep red but a pale pink because of the fine web of white fat that permeates the red flesh. Top quality Toro is often a brownish red” (Moskin).

But most consumers only know to look for the red color tuna. So what does this mean for businesses? Well, sushi chefs who refuse to serve the treated fish, according to Moskin, have seen a decline in sales. Furthermore, this ‘tuna trouble’ proves marketers need to understand how their consumers think about color and how the color of food influences their purchasing decisions.

### **Kool-Aid: A Colorful Success Story**

The previous two examples have described how color has caused problems for marketers trying to sell margarine and tuna. However, there is one product that owes its success to color: Kool-Aid. Adweek staff writer, Robert Klara writes, “for close to a century, Kool-Aid’s been affordable drink mix with a sew of flavors – but taste has never really been the point” (Klara).

In 1927, Edwin E. Perkins successfully produced what is still known today as Kool-Aid. Perkins began the sale of Koo-Aid with six original flavors—raspberry, cherry, grape, lemon, orange and root beer. Strawberry was not added until later (The Kool-Aid Story). “Kool-Aid became a summertime staple in most households with youngsters, the brightly-colored envelopes a standard item in summer time grocery sacks” (The Kool-Aid Story).

Most marketers appear to agree, Kool-Aid's success is due to the color of the product. In fact, in the product's almost one hundred years of existence, all of their advertisements have focused on the products color. Dietician, Althea Zaneosky explains, "[Kids] expect everything, including food, to be more colorful" (Marder), and as evidence from Kool-Aid's success, parents think its fun for kids too!

Marcus Hewitt, CEO of Dragon Rouge, a global design and innovation business, said it best, "Forget the flavor and the sweetness. The color's the thing that already set [Kool-Aid] apart" (Klara).

### **Conclusion: Color Matters**

So it appears that color does matter – even when it comes to American cheese. R. Wadhvani and D.J. McMahon from Utah State University even conducted a research study on how the color of low-fat cheese products influences the consumer's perception of flavor and overall liking which supports my theory that color matters in marketing. Their study proved that, "The overall liking of low-fat cheeses is highly dependent on its color and appearance" (Wadhvani and D.J.). Specifically:

"Low-fat cheese colored with annatto (at levels similar to that used in full-fat Cheddar cheese) has an atypical translucent, dark orange color that is not well accepted by consumers and received the lowest overall liking score. Adding titanium dioxide increases cheese opacity so it looks more like full-fat cheese. If too much titanium dioxide is added, the low-fat cheese becomes too white in appearance and consumer liking decreases" (Wadhvani and D.J.).

However, for marketers, color more than matters – it is a significant part of branding. Dr. Russell Ferstandig, a psychiatrist from Competitive Advantage Consulting, a company that advises marketers about the hearts and minds of consumers says, "Color serves as a cue. It's a condensed message that has all sorts of meanings." (Hall) Even better, "color is the least expensive way to change your product" (Tarter). Brands that have packaging in multiple colors and flavors take up more space of grocery store shelves, and therefore draw more attention.

Dr. Kantha Shelke, a food chemist and spokeswoman for the Institute of Food Technologists, comments on the importance of color as well, "Color creates a psychological expectation for a certain flavor that is often impossible to

dislodge” (Harris). Yet, as pointed out in an Advertising Age article, “in the catalog of a brand’s sensor equities, color has to be the single most overlooked, underleveraged asset. Which means some brands are missing out” (Sturgess).

Color is a vital tool in marketing, especially in food marketing. Although consumers eat with our mouths, they shop with their eyes. And with the growing abundance of choices offered to customers, color is a simple and effective way to stand out from the clutter.

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## **Advertising Portfolio**





## OM-WHO?

OMHU is a company that makes medical equipment and accessories, most notably walking canes. OMHU in Danish translates into "with great care," which is how all of their products are made.

## An Ignored Market

Think about the hundreds of stores that sell products for newborn babies. Babies"R"Us, babyGap, Gymboree, and Carters are just a few of the hundreds of stores that come to mind. Everything from the interior design and merchandise, to the smiling employees, is bright and cheerful.

What stark difference compared to the bland and depressing products marketed toward those at the end of their life. The only advertisements directed at retired consumers are gloomy and directed at what they can't do.

## "Too pretty to be embarrassed..."

As one consumer was testing out her cane for the first time she exclaimed, "It's too pretty to be embarrassed."

From hearing aids to walking canes, old folks seem to be embarrassed about 'being old.' The need for help is uncomfortable enough, but needing to carry and ugly product with you at all times is degrading.

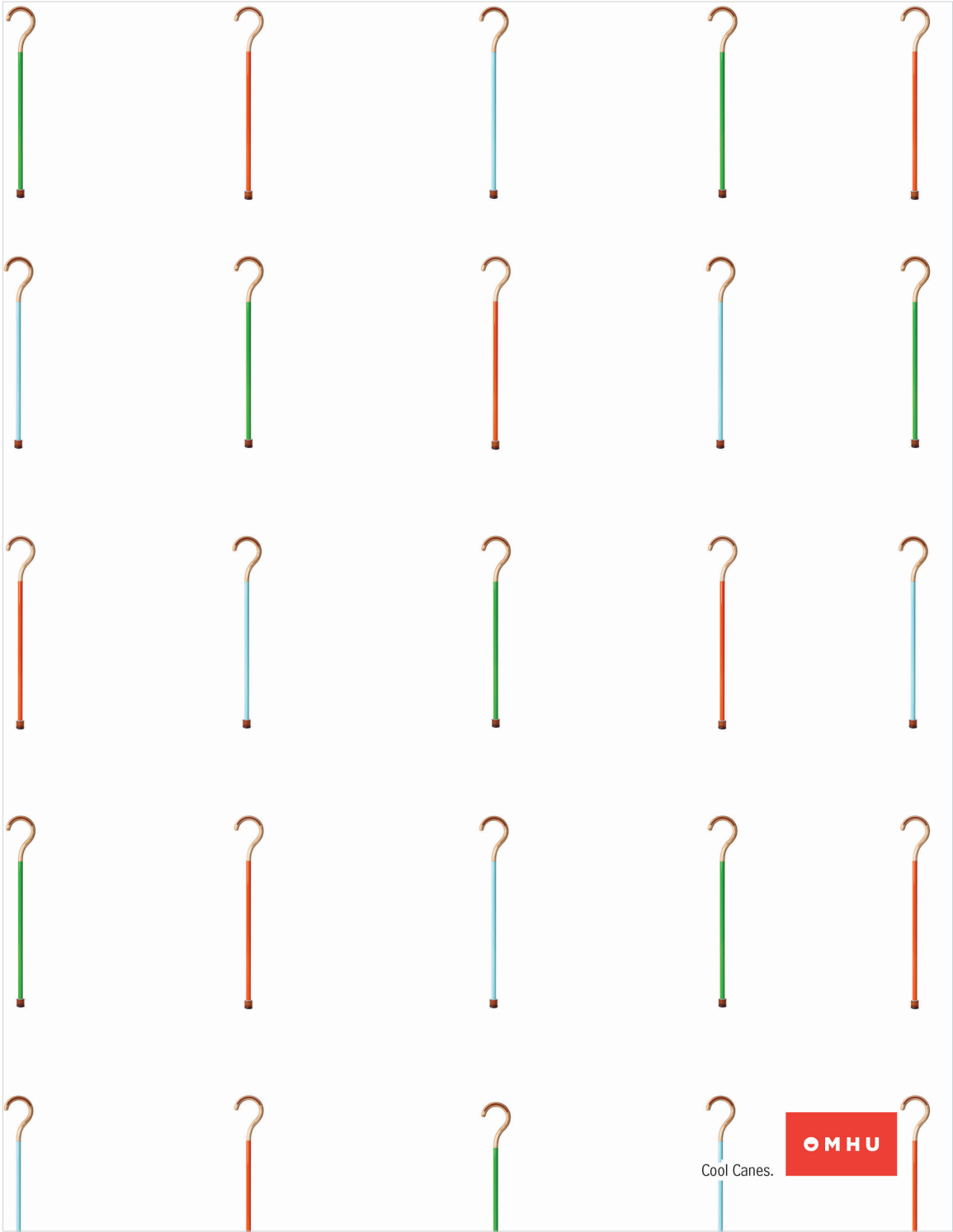
Seniors don't want to think about what's holding them back, but everything that they still can do.

## Insight

The idea of 'old' needs to be redefined. Elderly people aren't looking for products that will just 'help them get by,' but rather enjoy life, have fun, and feel alive.

## Solution

Remind people that life is beautiful at all stages.





# COMFORTABLE

Who said fashion has an age limit? With a variety of vibrant colors and a slick design, OMHU canes will make you the center of attention in next week's girls' get-together.

Because your age won't matter when you walk with confidence.

Cool Canes.

OMHU



## ATTRACTIVE

They say you look how you feel. With a variety of vibrant colors and a slick design, OMHU canes want to make you feel good so you can look good.

Because your age won't matter when you walk with confidence.

Cool Canes.





**OLD**

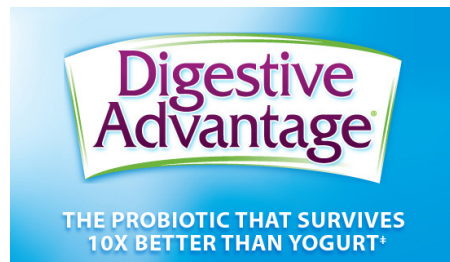
# FASHIONED

Who said fashion has an age limit? With a variety of vibrant colors and a slick design, OMHU canes will make you the center of attention in next week's girls' get-together.

Because your age won't matter when you walk with confidence.

Cool Canes.

**OMHU**



### **What is Lactose Intolerance?**

Lactose intolerance occurs when a person does not produce enough lactase. Lactase is the enzyme that digests the natural sugar found in most dairy products called lactose. Without lactase to break it down, lactose is able to travel through the large intestine. This causes a variety of disagreeable side effects such as gas, bloating, stomach cramps, diarrhea, nausea, and headaches. These unpleasant symptoms can begin as soon as 30 minutes after eating (and sometimes before you get a chance to leave the dinner table).

Lactose intolerance is fairly common, and does tend to run in families. Although it affects men and women fairly equally, Asians, Native Americans, African Americans, and Hispanic Americans are more likely to have lactose intolerance. Children are less likely to be affected, as the intolerance to lactose is usually developed during adulthood and sometimes during adolescence.

### **Food Equals Pain**

When I was younger, I drank so much milk that my mom struggled to keep enough in the fridge. My favorite snack was cheese (hold the crackers). However, one summer that all changed. I could barely eat a meal without becoming incapacitated. After a few weeks, I finally realized that I was lactose intolerant.

Ever since, eating just became painful. The foods that I wanted to eat made me feel sick, but the things I could eat tasted bland. So what did I do? I ate extra cheese on my pizza. Drank milk at dinner. And indulged in creamy, ice-cream-topped desserts. Were there consequences? Yes. But I would tolerate almost anything to keep eating dairy.

### **Not Just Me**

A recent episode of This American Life, the weekly public radio produced by Chicago Public Media, was titled "My Own Worst Enemy." The show told the stories of individuals who had been diagnosed with lactose intolerance and food allergies, but continued to eat what caused them to feel sick. Despite the adverse consequences, the show explained, many of these people took frequent trips to the emergency room after giving into their cravings.

Didn't they know better than to eat these 'trigger' foods? Those interviewed said they just couldn't resist. They didn't possess the self-discipline to stop themselves.

### **Why do people still eat dairy?**

I've been lactose intolerant for almost four years. Since then I've met so many people who share the same condition, and there is one thing we all have in common: We still eat dairy as a guilty pleasure.

Whether it's mom's homemade lasagna or a giant ice cream sundae, I know first hand that dairy is not just something you can give up. We all crave a warm, gooey grilled cheese sandwich or a thick, creamy milkshake every once in awhile – and we all give into those cravings despite the consequences.

### **Insight**

Clearly, the lactose intolerant population is far from giving up their creamy, guilty pleasures. If multiple trips to the bathroom, or even the emergency room, haven't stopped them yet – it seems nothing will.

### **Solution**

Digestive Advantage, a little known digestive aid, helps people to digest dairy and relieve unwanted side effects. Although the lactose intolerant have never given dairy, they can now enjoy 'dairy without the ouch.'



Dairy without the ouch.



Dairy without the ouch.





Dairy without the ouch.



### **Everybody Loves Duct Tape**

The problem with duct tape might be that everyone loves it – including teenage girls. What started as a simple silver duct tape wallet has become a girly, arts and crafts extravaganza. Girls now use duct tape to create entire outfits, including their prom dresses! And it gets worse. Duct tape now comes in all sort of colors and prints like neon pink zebra print and Justin Bieber, catering to this demographic. As duct tape becomes more of a feminine product, men might start to look for a more masculine replacement.

### **Scotch® Tough Duct Tape**

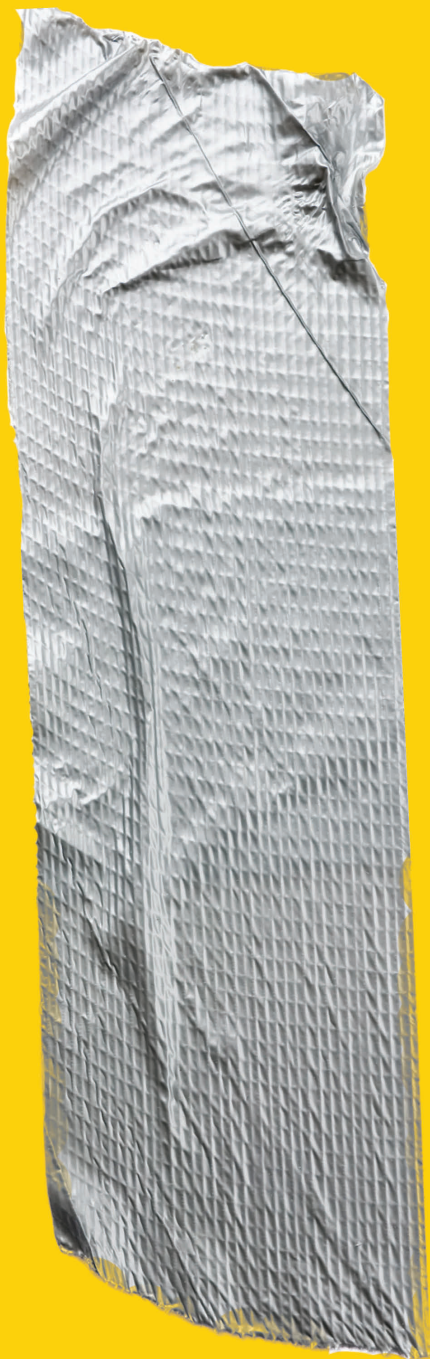
Taking advantage in a gap in the market, Scotch released a new brand of duct tape. It's tougher than the original, and has more masculine packaging. Double layer of adhesive, Scotch® Tough duct tape is not made for much more than silly arts and crafts.

### **Insight**

When it comes to home improvement to professional construction, men want tools that work.

### **Solution**

Position Scotch® Tough as the strongest tape on the market.

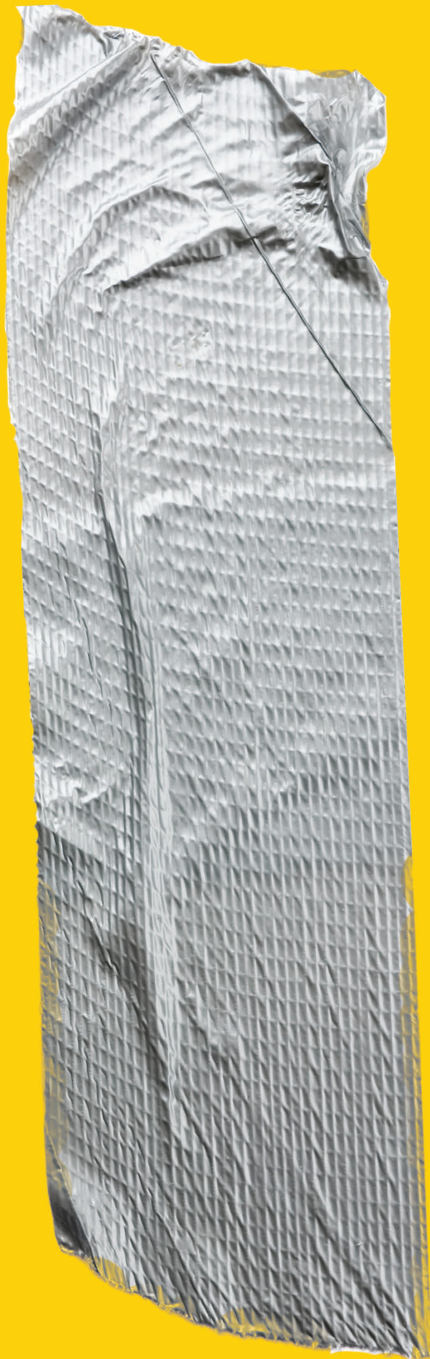


Under this strip of Duct Tape is a  
**winning lottery  
ticket worth  
one million dollars.**

Claim it if you'd like.



Trust the Duct.

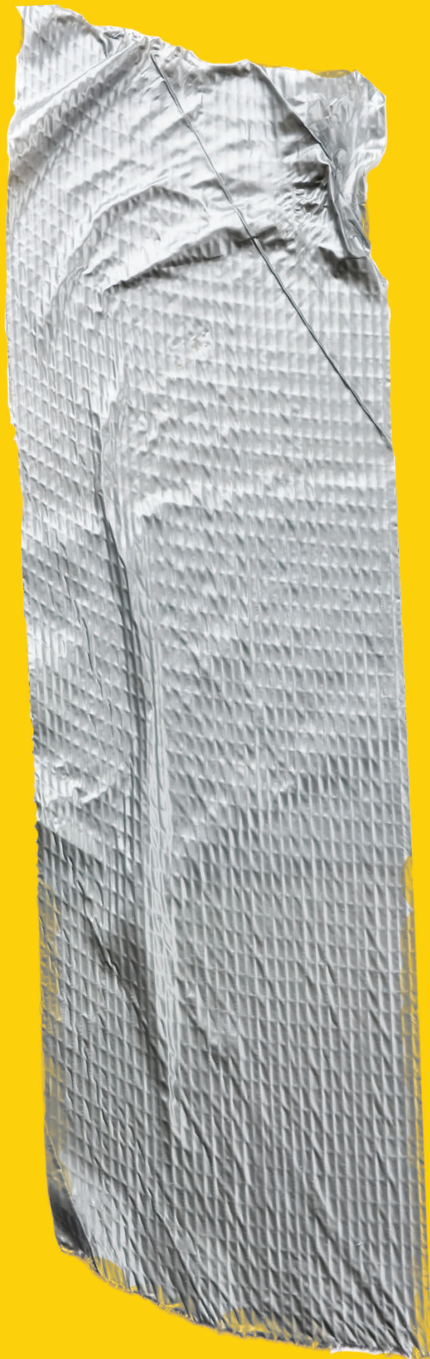


Under this strip of Duct Tape is a  
**the answer to the  
Meaning Of Life.**

Claim it if you'd like.



Trust the Duct.



Under this strip of Duct Tape is a  
**ticket for your  
all-expense-paid  
Caribbean vacation.**

Claim it if you'd like.



Trust the Duct.





### Challenge

Get more people to snack on Orville Redenbacher's popcorn.

### Why aren't more people eating popcorn?

There are many reasons why popcorn is a great snack. It's relatively inexpensive, quick to make, easy to take with you, very filling, and stays fresh. It's even pretty healthy snack (before you add all the butter and salt, of course). No wonder people have been eating popcorn since biblical times!

But why is it that most American's reach for chips, crackers, granola bars, cookies and other less healthy treats without even thinking of popcorn?

### Popcorn & Movies

Most people only associate popcorn with the going to the movies – or watching them at home. After talking with friends and classmates, I found they had similar stories.

So now the question became, how do you get people to eat Orville Redenbacher's popcorn when they aren't watching a movie?

### Insight

Orville Rendenbacher was a great American man. Born in Brazil, Indiana (which is still home to the annual Popcorn Festival of Clay County), Rendenbacher started growing popping corn when he was only 12! His dedication to and passion for popcorn resulted in the creation of the lightest and fluffiest popcorn yet.

From baseball games to state fairs, popcorn has always been a great American snack. Most of the popcorn consumed throughout the world is grown in the midwest of the United States. The fact that majority of the world's supply of corn, a crop native to the Americas, is still raised by famers in Nebraska, Iowa, and Indiana farmers is amazing.

### Idea

Celebrate popcorn as a brilliant, patriotic snack. Create a campaign that honors the hard-working, mid-western famers and the heritage of this classic American treat.

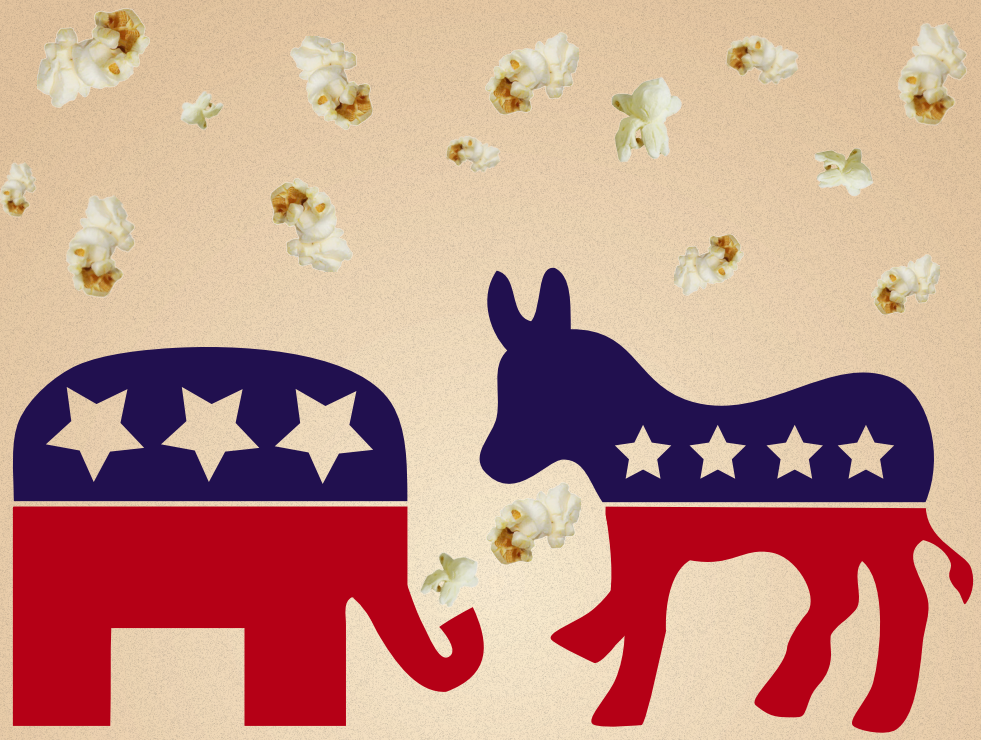


Corn & Stripes Forever.



United We Snack.





The only snack that crosses party lines.



United We Snack.



“Give me your tired, your poor,  
Your huddled masses yearning for popcorn...”



United We Snack.

## Summary

Color is a vibrant, attention-grabbing tool in the communications world. This study examined the significant role color plays in the advertising and marketing of food products.

Some scientists theorize that the tastes we perceive and the flavors we expect based on color can be traced back to hunting and gathering days. People first sense food with their eyes, not their mouths. Therefore, color gives clues to everything from freshness and flavor, to familiarity. Many studies have shown that color greatly influences both the perceived taste and the expected flavor of a product.

For marketers, choosing the right color is more complicated than making food products look fresh and delicious because how a consumer interprets color depends on their gender, race, and age. Men and women may see color differently, but they both feel comfortable about the color blue. Race and culture also affect how color is understood. People from places that experience a great deal of warm sunny weather prefer brighter colors, where some cultures do not consider orange to be a color. Young children love bright colors, but marketers should be aware that the older generations are starting to enjoy bright colors as well.

The study continues to examine three case studies of how color has affected marketing and overall sales in the past. First, a great debate, one that still exists in some parts of Canada today, over whether margarine should be allowed

to be yellow dates back to the 1800s. Second, the current fishing industry has made tuna more readily available, but it seems most consumers only want to buy the fish if its flesh is bright red. What's the solution? Spray the fish with carbon monoxide to keep it from discoloring with age. The debate continues on whether this practice is safe and/or legal in many places around the world. Lastly, the study considers the success of the famous Kool-Aid drinks. The bright color of this product was a central part of every advertising campaign dating back to the early twentieth century.

Clearly, color can have a profound effect on the marketing and advertising of food products and, if used right, can lead to great sales. Brand managers should remember that although consumers eat with our mouths, they shop with their eyes.